

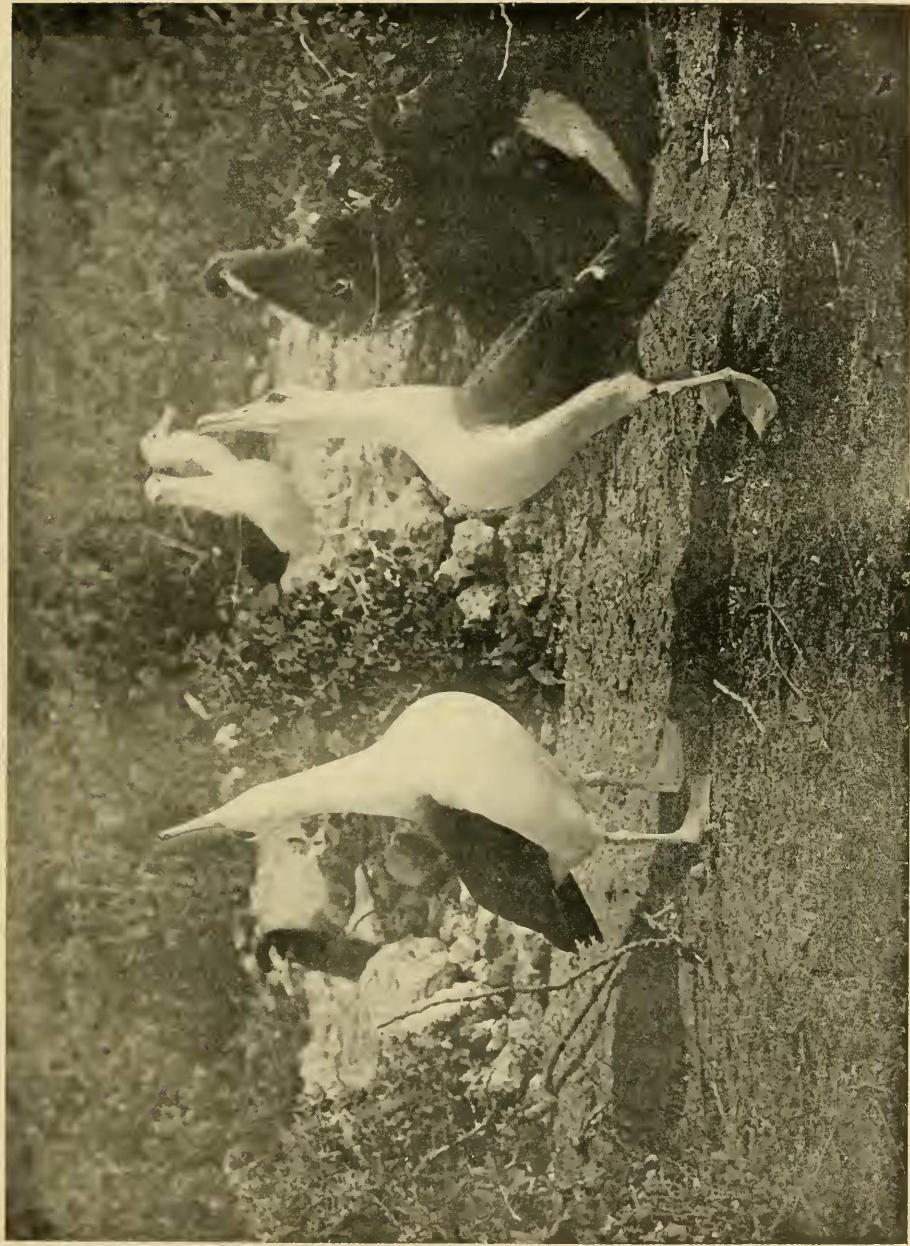
ON THE HABITS OF THE LAYSAN ALBATROSS.

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Plates II-VII.

THE magic name of Laysan¹ will ever bring to my mind the picture of innumerable Albatrosses thickly scattered in reposeful attitudes over a broad stretch of bare phosphate rock, near the southern extremity of the islet. Here in years past the indefatigable Japanese laborers had scraped a plain quite free of all the marketable phosphate rock, and had left about the borders several piles of the valuable mineral. Since then the gonies have made themselves at home, and have completely preëmpted the site. From the top of one of these hillocks I spent odd breathing moments, watching the life in this largest rookery of the island, because even the slight advantage of fifteen feet would bring much into view that before was hidden. We were agreed in calling this *the* rookery, since here in a given space were more birds than elsewhere on the island. And besides a very convenient road led to it from Mr. Schlemmer's quarters. One might ask, "Why mention the road?" The Bonin Petrels (*Æstrelata hypoleuca*) tunnel in the soft soil in countless numbers, and if one crosses the upper slopes of the island he must walk at least one half mile before gaining the solid ground near the lagoon. Nearly every other step through this area will carry him abruptly into the subterranean tunnels of these sobbing birds, and as one of our party suggested the novelty quickly wears off in the midday sunshine. So it happened we patronized the road, and our eager strolls often either ended or began near the rookery, where also there was a brackish water pond much frequented by curlews and ducks.

¹ Although the notes which form the basis of this paper have already been published in 'Birds of Laysan and the Leeward Islands, Hawaiian Group' (U. S. Fish Commission Bulletin for 1903, pp. 1 to 39, plates 1 to 10), the writer believes an account of the peculiar habits of the Albatross, with illustrative photographs, will be of interest to readers of 'The Auk.' For a short note descriptive of Laysan and its bird life the reader is referred to the October, 1903, issue of this journal, page 384. Unless otherwise stated the plates refer to *Diomedea immutabilis* Rothschild.



FINALE OF ALBATROSS DANCE — THE DUET.

The Laysan Albatross (*Diomedea immutabilis*), however, is distributed all over the island with the single exception of the sea beaches, which on all sides saving the west are colonized by the Black-footed Albatross (*D. nigripes*). The former species far outnumbers *nigripes*, and if actually not the most numerous inhabitant of the island is at any rate the most conspicuous and interesting. The Laysan Gony, or 'Gooney' as sailors pronounce it, very evidently prefers the open to the bushy area, for the flat plain surrounding the lagoon is its favorite habitat, and we found the young here in far the greatest numbers. This great colony extended all the way around the lagoon, but certain portions were more congested than others, as 'the rookery' for example, spoken of above. Young *immutabilis* were also found sprinkled rather thickly over the remainder of the island through the bushy grass area, preëmpted by petrels, and they even affected the windy slopes above the beaches. Only a very few *nigripes*, however, were detected in the central portion of the island, and these of course were widely scattered among *immutabilis*.

The rookeries present a very lively scene. At certain times of day the greater number of the adults are off to sea fishing, but there are always enough left at home to constitute about one third of the total number, the remainder being the young. If these are not disporting themselves in ridiculous attitudes, the old birds form a sufficient diversion with their endless dance and song. In Plate III, figure 1, a view is given looking over the rookery. Most of the birds here are young, the old ones being away at sea. Figure 2 is a characteristic scene on the shore of the lagoon, the picture having been taken in the afternoon when most of the old birds had returned from their morning's fishing. The dark area to the left is covered with beautiful purplish-pink flowered *Sesuvium portulacastrum*.

At the time of our visit the young were nearly four months old, and were quite as heavy as the adults, although the permanent feathering was present only on the lower parts. They were everywhere. My impression every time I crossed the petrel cities was that each great tussock of grass harbored a young Gony in its shadow, ready to dart forward and try the quality of my trousers. Mr. R. H. Beck has suggested segments of stove pipe as an effective armor in crowded bird colonies, especially as proof

against boobies, and I am inclined to agree with him. If we brushed too near the young Gonies they were quick to resent the intrusion, and flew into a rage, leaned forward and snapped their beaks rapidly in an attempt to strike terror to our hearts. Or frequently they would waddle out of their shady retreat and attack us, as it were, on our own ground, stumbling forward in wabby efforts to reach us. Sometimes they would trip up in a petrel's hole or fall clumsily forward on their chins, and promptly disgorge their breakfast at us. Unless my observation is lacking, they always seemed to stumble preparatory to this fusillade, which once delivered left them looking very dejected indeed, as hunger is their chief trouble. Usually after the first paroxysm is over one can stroke them with little danger of scratched hands. They maintain a small fire of objection, with impotent nips, or try to sidle off. But occasionally a youngster is fully aware of his powers.

When undisturbed these absurd creatures sit for hours on their heels with their feet tilted in air, gazing stupidly ahead, with little intelligence in their stolid countenances. (Plate VI, Fig. 2.) They are peaceable as a rule, but sometimes engage in mild squabbles with youthful neighbors. The shallow basin-like hollow in which the egg is deposited is the young Albatross's home, and it usually does not stray far, except on these little forays. But later the same feeling of growing strength leads them to slowly fan their wings from time to time. During a light shower we saw a considerable colony thus engaged, the wave of motion passing far away, as new companies caught the enthusiasm. The movements were kept up for some minutes and proved a novel sight. I have seen young birds collect dried grass and similar material, which happened to be within reach, and carefully cover the hollow in which they were sitting, as if trying to form some sort of cushion.

A spirit of inquiry also sometimes leads the young Gony into trouble. We found one buried to its neck in a collapsed petrel burrow, yet still living. From the condition of the surrounding soil it was evident that the creature had been in this predicament for some time, and had been faithfully tended by its parents. Nor did it fancy being dug out, but objected most vigorously to our interest. When finally restored to a normal position, it took a



FIG. 1. ROOKERY OF LAYSAN ALBATROSS.



FIG. 2. NEAR THE LAGOON, LAYSAN.

better view of matters and began to preen its feathers. But even with these vicissitudes, and the persecution of jealous mothers of other young (to be related presently) they have few amusements to vary the monotony of the long day, for in this topsy-turvy land it is the grown-up folks who play while the young are grave and demure.

The old birds received us at once on equal terms with any feathered inhabitant of the island. They did not care a whit for our presence, and continued their domestic occupations and amusements as if we were part and parcel of the community. They would not tolerate any familiarity, however, and if we attempted to stroke their plumage they backed off with agility, unless hindered by some obstructing grass tussock, when their surprise was amusing to witness. They have a half-doubting inquisitiveness, and if we sat quietly among them, they would sooner or later walk up to examine us. (Plate IV, Fig. 2.) One bird became greatly interested in the bright aluminum top to my tripod, which it carefully examined from all sides. Finally it tested the cap with its beak, and appeared much surprised, yet pleased, with the jingling sound, repeating the experiment until satisfied.

The old birds have an innate objection to idleness, and so for their diversion they spend much time in a curious dance, or perhaps more appropriately a 'cake-walk.' This game or whatever one may wish to call it, very likely originated in past time during the courting season, but it certainly has long since lost any such significance. I believe the birds now practise these antics for the pure fun they derive, and should anyone challenge my belief that birds are capable of such a high degree of intelligence as to discriminate so finely, I would be tempted to answer: "Go to Laysan and be convinced." Let us imagine we are on the island, and can stop for a moment to watch a pair of Gories close at hand. We will have some difficulty in choosing, for from where we are seated, among the grass, near the edge of the plain, we can easily count twenty-five couples hard at play. This is what we see.

At first two birds approach one another, bowing profoundly and stepping heavily. They swagger about each other, nodding and

courtesying solemnly, then suddenly begin to fence a little, crossing bills and whetting them together, sometimes with a whistling sound, meanwhile pecking and dropping stiff little bows. (Plate V, Fig. 1.) All at once one lifts its closed wing and nibbles at the feathers beneath, or rarely, if in a hurry, quickly turns its head. The partner during this short performance, assumes a statuesque pose, and either looks mechanically from side to side, or snaps its bill loudly a few times. (Plate V, Fig. 2.) Then the first bird (to the left of the picture) bows once, and pointing its head and beak straight upward, rises on its toes, puffs out its breast, and utters a prolonged, nasal, *Ah-h-h-h*, with a rapidly rising inflection, and with a distinctly 'anserine' and 'bovine' quality, quite difficult to describe. While this 'song' is being uttered the companion loudly and rapidly snaps its bill. (Plate VI, Fig. 1.) Often both birds raise their heads in air as shown by Plate II, and either one or both favor the appreciative audience with that ridiculous, and indescribable bovine groan. When they have finished they begin bowing to each other again, rapidly and alternately, and presently repeat the performance, the birds reversing their rôle in the game or not. In the most successful dances the movements are executed in perfect unison, and this fact much enhances the extraordinary effect. The pictures convey but a poor likeness of the actual scene; the wonderful sky and sunshine, the spotless and shining plumages, the droll cries, and most important the actual living presence of the splendid birds themselves. It is an experience never to be forgotten.

There seems to be no very hard and fast lines to these antics, but variations occur, and certain stages may be abbreviated or prolonged to suit the whim of the individual. The majority of cases, however, follows the sequence I have indicated. The attention of the reader is called to the fact that Plate V, Figs. 1 and 2, together with Plate II, form a series, taken in rapid succession, of the same pair of individuals. Plate VI, Fig. 1, representing the more usual finale of the dance, is from a pair of birds very near the above, and was taken a few moments later. The pair represented in Plate II, after their splendid exhibition, as if having knowingly done their best for me, quit entirely and walked deliberately away. It is possible that this figure represents the 'grand finale' of the whole performance, but I have only this observation



FIG. 1. A CORNER IN ONE OF THE COLONIES.



FIG. 2. AMONG THE LAYSAN ALBATROSSES.

to offer. In the numerous other cases in which I saw *both* birds 'sing,' I do not remember whether they continued thereafter or not.

It is very amusing to watch three engage in the dance, one attempting to divide its attention between two. This 'odd' bird starts by bowing to the first partner, whom he suddenly forsakes with a final deprecatory nod, and takes up the thread of the dance with the second. The latter always seems ready to join in, since he has been keeping up a sort of mark-time in the movements. Thus the single one keeps switching back and forth, trying as it were, to be on good terms with both partners at once. Three do not keep this up very long, however, since the odd bird either shows a preference for one of the partners and ignores the other entirely, or walks off to seek a new acquaintance. But throughout it all they are always exceedingly polite, and never lose their temper in any way.

Occasionally while 'cake-walking' one will lightly pick up a straw or twig, and present it to the other, who does not accept the gift, however, but thereupon returns the compliment, when straws are promptly dropped, and all hands begin bowing and walking about as if their very lives depended upon it.

Several times at this stage of affairs I have walked quietly among a group of the busy creatures, and have begun to bow very low, imitating as nearly as possible the manner of the Gonies. They would all stop and gaze at me in astonishment, but recovering their usual equanimity almost at once would gravely return my bows and walk around me in puzzled sort of way, as if wondering what kind of a bird I might be. I thought of trying this because in Rothschild's 'Avifauna of Laysan' (which we had taken with us on the steamer 'Albatross') the following extract is given from Kittlitz's notes on the birds of Laysan.

"When Herr Isenbeck met one he used to bow to it and the Albatrosses were polite enough to answer, bowing and cackling. This could easily be regarded as a fairy tale; but considering that these birds, which did not even fly away when approached, had no reason to change their customs, it seems quite natural."¹

¹ Extract from *Avifauna of Laysan, etc.*, p. iii, (F. H. v. Kittlitz in: *Museum Senckenbergianum*, I, pp. 117 et seq.)

I found that in most cases the birds would bow to me if they were interrupted in their dance, or if they had very recently been playing, but would not bow at all if accosted near their young, or when standing idle. Unusual as this trait may appear it exemplifies again what extraordinary birds Albatrosses really are.

I saw the Black-footed Albatrosses (*D. nigripes*) rather seldom engaged in the dance, and indeed they impress one as more matter-of-fact creatures. The only difference which was observed in the ceremony as carried out by the two species, is that *nigripes* spreads its wings slightly (the metacarpus or 'hand' being folded closed) when it lifts its head to utter the nasal song.

If we wander over the island on a moonlight night a strange scene greets us. Nocturnal petrels and shearwaters are wide-awake and are sobbing and yowling as if all the cats in a great city had tuned up at once. Back and forth in the weird light flutter shadowy forms, and from beneath our feet dozing young Gonies bite at us in protest. Down by the lagoon where the herbage is short we can see for some distance, and the ghostly forms of Albatrosses shine out on all sides, busily bowing and fencing, while the nasal sounds of revelry are borne to us from far across the placid lagoon, and we know that in other parts of the island the good work is still progressing. And so in the leisure moments of the long summer days, and far into the night, these pleasure-loving creatures seem to dance for the joy of dancing and only work because they must.

But in their hours of toil they hie themselves off to sea, and scour the waves for the elusive squid, which is a staple article of diet for the larger members of the vast bird population, the gannets, perhaps, excepted. About sunrise the main body of the white company begins to return, and for several hours they straggle in, tired but full, and seek their sleepy children, who are soon very much awake. Although the Laysan Albatrosses undoubtedly do a small part of their fishing during the day, I cannot help but feel, from the nocturnal or crepuscular habits of their food — certain cephalopods — and the prevalent feeding hours, that the major portion is done in the very early morning, perhaps from just preceding dawn till light. I noted particularly during the one day I was on the steamer, while she was dredging in the